

To: Planning Board

From: Carol Holley

Re: Zoning Bylaw Amendment – Allowing for Pervious Paving

Date: February 16, 2009

Recent conversations and e-mails between and among myself (ACES, Water Resources Advisory Committee), Mary Michelman (Acton Stream Teams, ACES) and Ann Sussman (Design Review Board) have led to my conclusion that, while pervious paving may be a viable stormwater management solution for many areas in our community, any proposed changes to a bylaw regarding water management need to be carefully crafted, with thorough definitions and appropriate coordination among all stakeholders. The currently proposed article is not ready for prime time, and should be the subject of efforts by Planning, DRB, Health, WRAC, the Acton Water District, ACES and other concerned stakeholders over the coming year, with special emphasis placed on ensuring the protection of groundwater quality.

The basis of discussions has been, by and large, the following considerations:

- Low Impact Development (LID) employs decentralized, frequently low-tech technologies to manage stormwater, with the goal of keeping local water local and treating it using as natural a remediation process as possible; these technologies are referred to as “Integrated Management Practices” (IMPs), as opposed to the more traditionally engineered “Best Management Practices” (BMPs). LID methods include use of rain barrels, vegetated roofs, several types of pervious paving, vegetated swales along paved areas, rain gardens, and bioretention areas in parking lots (see [www.lowimpactdevelopment.org](http://www.lowimpactdevelopment.org) for more information). Some IMPs carry a particular maintenance burden – *e.g.*, pervious paving in parking lots needs to be vacuum swept several times a year to remove the fines that will clog the paving and the underlying infrastructure.
- All technologies are not necessarily appropriate for all locations. Pervious paving relies to a large degree on natural soil filtration for the treatment of contaminants that can come off of cars. Not all of the contaminants are necessarily treatable in this manner. Therefore, in sensitive areas, such as the Zone II areas delineated by the Acton Water District for public water supply protection, pervious paving may not be an appropriate solution. In fact, when Somerville Lumber was constructed in the 1980’s, the Board of Health required a particularly impervious form of asphalt with appurtenant infrastructure to keep the parking lot runoff away from the Kennedy Wellfield.
- The “LEED for New Construction v 2.2 Registered Project Checklist” allows for two points for stormwater management: Credit 6.1 allows for Stormwater Design, Quantity Control, and Credit 6.2 allows for Stormwater Design, Quality Control. It appears that neither of these points are required for certification. Certification requirements range from 26 for baseline certification to 52 for platinum level certification.
- Stormwater management, which the pervious paving issue addresses, is the purview of the Board of Health and part of the mission of the Water Resources Advisory Committee (WRAC). No changes to the Zoning Bylaw should be made without coordination with all appropriate stakeholders – *e.g.* AWD, DRB, ACES, Acton Stream Teams, etc.

Please remove this proposed bylaw amendment from the 2009 Warrant.